

SB 730

RELATING TO TRANSPORTATION

**JOEL K. MATSUNAGA
CHIEF OPERATING OFFICER & EXECUTIVE VP
HAWAII BIOENERGY, LLC**

February 4, 2013

Chairs Gabbard, Nishihara, and Dela Cruz and Members of the Senate Committees on Energy and Environment, Agriculture, and Economic Development, Government Operations and Housing:

I am Joel Matsunaga, testifying on behalf of Hawaii BioEnergy in support of SB 730, "Relating to Transportation."

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SUMMARY

Hawaii BioEnergy, LLC ("HBE") supports SB 730, which amends the Ethanol Facility Income Tax Credit to apply to various types of renewable fuel, with production and minimum required capacity to be measured in British thermal units. While this credit, which was established to jumpstart the local ethanol industry, could be tremendously useful to prospective producers, it is limiting in both its scope and impact and needs to be reformed in order to foster the production of advanced, next-generation biofuels which can supply local power and transportation markets. Restructuring the existing Ethanol Facility Credit to be technology neutral and BTU-based would incentivize a broader range of advanced, more efficient biofuels applicable to multiple off-takers. This is particularly important as the biofuel refining process – similar to the petroleum refining process – can produce a slate of fuels able to be sold to multiple end-users. Applying a Biofuels Production Credit to projects capable of selling to both the transportation and power generation sector will help to attract a broader range of investors, maximize productive efficiencies, and integrate higher volumes of renewable fuels into Hawaii's

economy. Further, applying the credit to new construction and establishing a sunrise date would help to provide assurance to investors and attract new, needed investment into the agro-industrial sector while not needlessly tying up state funds.

HAWAII BENEFITS FROM LOCAL BIOFUELS PRODUCTION

Hawaii BioEnergy is a local company dedicated to strengthening the state's energy future through sustainable biofuel production from locally grown feedstocks. Among its partners are three of the larger landowners in Hawaii. HBE and its partners would like to use significant portions of our land to address Hawaii's existing and growing energy needs.

Understanding the urgency of these needs and anticipating growing demand, HBE has dedicated the last several years to feedstock trials, extensive technology evaluation and detailed financial modeling of various production pathways in an effort to ensure HBE's ultimate production is as productive, efficient and sustainable as possible. HBE's own research, development and demonstration (RD&D) efforts have been accelerated by funding from the US government's Defense Advanced Research Projects Agency (DARPA), Office of Naval Research, as well as a Congressional Appropriation administered through the Air Force Research Laboratory. Collectively, this analysis has enabled HBE to clearly understand the production potential and challenges associated with Hawaii's unique natural resource base, geography, climate, market and infrastructure. HBE has signed a landmark 20-year off-take agreement for high-density fuels with Hawaiian Electric Company and is prepared to move forward with the commercial production of advanced fuels for both the power generation and transportation sectors.

While Hawaii holds tremendous potential to produce a range of advanced, high-density biofuels from locally produced feedstocks and innovative next generation technologies, the industry is still in its infancy and faces a myriad of cost and development challenges. Many of these challenges are attributed to the fact that Hawaii's agricultural and otherwise productive

lands are relatively small, non-contiguous parcels with varying microclimates and other conditions which limit scale and increase operational costs. Further, advanced conversion technology capable of most efficiently converting bio-based feedstocks into high-density fuels is just reaching commercial scale. The advanced technology, coupled with the downturn in the economy, increase the challenges associated with securing project financing. Such limitations and cost impacts are particularly pronounced in Hawaii where the cost of doing business is already disproportionately high relative to the mainland.

Amending the Ethanol Facility Credit to a Biofuels Production Credit would help to attract a wider range of investors and help offset the technology and capital risks inherent in the establishment of a new industry. This credit is of particular importance to companies such as HBE that intend to utilize advanced, next generation feedstocks and conversion technologies which are more efficient and have the potential to produce high density, drop-in fuels, but carry substantially higher capital costs than first generation biofuels. Basing the credit on British Thermal Units, and structuring the credit to support new investment in advanced technologies will foster more efficient production while helping stimulate Hawaii's agricultural sector and establish the foundation from which Hawaii's bio-based economy can grow.

In addition to expanding the credit to apply to a broader range of fuels, it is key that the support applies to facilities producing fuels for both transportation and power generation, as commercial-scale biofuels refining facilities – similar to petroleum refining facilities - produce multiple fuels or 'splits' available for sale into multiple markets. Supporting production for both various sectors maximizes productive efficiencies, strengthens the viability of the operation, and provides a broader slate of renewable fuels for Hawaii customers.

CONCLUDING REMARKS

HBE is moving forward with advanced, bio-based energy projects from locally grown feedstocks that will help provide a local, renewable source of energy for Hawaii and sustain the

states agricultural resources for years to come. Long-term contracts, such as the contract between HBE and HECO (which requires multiple customers) and incentives such as a Biofuels Production Tax Credit, help to reduce total project costs and associated risks, making project more attractive to outside investors and financing institutions. SB 730 would play a critical role in establishing Hawaii's biofuel industry, strengthening the state's energy security position, and achieving the state's renewable energy goals. Based on the aforementioned, Hawaii BioEnergy respectfully requests your support for SB 730.

Thank you for the opportunity to testify.